

Flood Damage Prevention Ordinance

FCD 01-09



Revised: July 28, 2009

ORDINANCE NO. FCD 01-09**AN ORDINANCE OF THE BOARD OF DIRECTORS
OF THE NAVAJO COUNTY FLOOD CONTROL DISTRICT,
AMENDING ORDINANCE NO. FCD 01-08, THE NAVAJO
COUNTY FLOOD DAMAGE PREVENTION ORDINANCE**

WHEREAS, the Board of Directors of the Navajo County Flood Control District adopted Ordinance No. FCD 01-08, the Navajo County Flood Damage Prevention Ordinance, on August 19, 2008; and

WHEREAS, the Floodplain Administrator has recommended certain technical amendments to said Ordinance; and

WHEREAS, following a duly noticed public hearing held this date, the Board of Directors finds that the recommended amendments are in the public interest and should be approved,

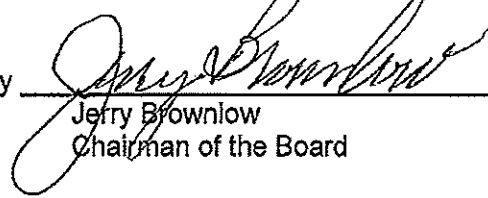
NOW, THEREFORE, BE IT ORDAINED by the Board of Directors of the Navajo County Flood Control District that Ordinance No. FCD 01-08 is hereby amended as follows:

1. In Article II, Definitions, the definition of Accessory Structure is amended by deleting the language "(i.e., small, low-cost sheds)."
2. In Article II, Definitions, the definition of Substantial Damage is amended by deleting the language "(See Cumulative Substantial Damage)."
3. In Article III, General Provisions, Paragraph 2, Basis for Establishing Areas of Special Flood Hazard, the language "November 19, 2003" is deleted and the language "September 26, 2008" is inserted in its place.
4. In Article IV, Administration, Paragraph 2, Designation of the Floodplain Administrator, the existing language is deleted in its entirety and the following new language is inserted in its place: "The Floodplain Board shall by resolution appoint either the Navajo County Deputy Director of Flood Control or a Certified Floodplain Manager to serve as the Floodplain Administrator. In the absence of such appointment or in the event of a vacancy in the office, the Navajo County Engineer shall serve as the Floodplain Administrator."
5. In Article V, Provisions for Flood Hazard Reduction, Paragraph 1.f.ii, Accessory Structures, is amended by adding the following new subparagraph 1.f.ii.d:
 - "d. Flood-resistant materials must be used and all mechanical and utility equipment must be elevated or flood-proofed to or above the Regulatory Flood Elevation."

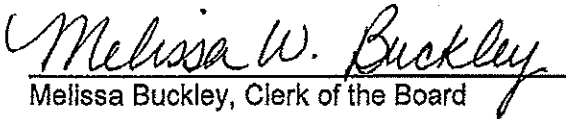
SO ORDAINED by the Board of Directors of the Navajo County Flood Control District at Holbrook, Arizona, on July 28, 2009, by a vote of 4 ayes and 0 nays. 1 absent.

BOARD OF DIRECTORS OF THE NAVAJO
COUNTY FLOOD CONTROL DISTRICT

By


Jerry Brownlow
Chairman of the Board

Attest:


Melissa Buckley, Clerk of the Board

ORDINANCE NO. FCD 01-09

FLOOD DAMAGE PREVENTION ORDINANCE

AN ORDINANCE OF THE BOARD OF DIRECTORS
OF THE NAVAJO COUNTY FLOOD CONTROL DISTRICT,
PROVIDING FOR FLOOD CONTROL IN AREAS SUBJECT
TO THE JURISDICTION OF THE FLOOD CONTROL
DISTRICT; AND SPECIFYING CRIMINAL PENALTIES
FOR VIOLATIONS.

ARTICLE I

STATUTORY AUTHORIZATION, FINDINGS OF FACT AND PURPOSE

1. **STATUTORY AUTHORIZATION.** A.R.S. § 48-3601 through § 48-3627 delegate to each county Flood Control District the responsibility to adopt regulations to promote the public health, safety and general welfare of its residents.
2. **FINDINGS OF FACT.**
 - a. The Areas of Special Flood Hazard within Navajo County are subject to periodic inundation which may result in loss of life and property and adversely affect the public health, safety and general welfare.
 - b. Flood losses are caused by the cumulative effect of Obstructions in Areas of Special Flood Hazard, which increase Flood heights and velocities and, when inadequately anchored, cause damage in other areas. Uses that are inadequately Floodproofed, elevated or otherwise protected from Flood damage also contribute to Flood losses.
3. **STATEMENT OF PURPOSE.** This ordinance is intended to promote the public health, safety and general welfare by minimizing public and private Flood losses.
4. **INCORPORATION OF OTHER FLOOD CONTROL LAWS.** All federal and state flood control statutes, regulations and other materials having the force of law, as the same may be amended from time to time, are hereby incorporated by reference and shall be deemed a part of the Flood Management Regulations of the Navajo County Flood Control District. This ordinance and the Floodplain Management Regulations shall take precedence over any less restrictive conflicting local laws in areas subject to the jurisdiction of the Flood Control District.

5. **REPEAL OF PRIOR ORDINANCES.** This ordinance supersedes and replaces all prior Navajo County ordinances dealing with the same subject matter, including without limitation the current Flood Damage Prevention Ordinance adopted on November 23, 1987.
6. **COMMON NAME.** This ordinance may be referred to and cited as the "Navajo County Flood Damage Prevention Ordinance."

ARTICLE II

DEFINITIONS

Unless specifically defined below, terms used in this ordinance shall have their common and ordinary meanings and shall be liberally construed to accomplish the intended purposes of this ordinance. Terms defined below are either used in this ordinance or are found in FEMA Floodplain management documents.

Accessory Structure means a structure that is:

1. Solely used for limited storage; and
2. Less than 144 square feet in area when measured using external dimensions.

ADWR means the Arizona Department of Water Resources.

Appeal means an allegation that there is an error in a requirement, decision, interpretation or determination by the Floodplain Administrator in the enforcement or administration of this ordinance and a request that the same be reviewed by the Floodplain Board pursuant to Article VI, Section 2.

Area of Shallow Flooding means a designated AO or AH zone on a Community's Flood Insurance Rate Map (FIRM) with a 1% or greater annual chance of Flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of Flooding is unpredictable and where velocity flow may be evident. Such Flooding is characterized by ponding or sheet flow.

Area(s) of Special Flood Hazard means the land in the Floodplain subject to a 1% or greater chance of Flooding in any given year. These areas include those designated as Zone A, AO, A1-30, AE, AR, A99 or AH on the FIRM and other areas, which may not be shown on the FIRM, as determined pursuant to the criteria adopted by the Director of ADWR.

Base Flood means the Flood having a 1% chance of being equaled or exceeded in any given year.

Base flood Elevation or BFE means the elevation shown on the Flood Insurance Rate Map for Zones AE, AH and A1-30 that indicates the water surface elevation resulting from a Flood that has a 1% or greater chance of being equaled or exceeded in any given year.

Basement means any area of a building having its floor sub-grade (below ground level) on all sides.

Community means the State of Arizona or any political subdivision thereof, or any Indian tribe or tribal organization that has authority to adopt and enforce floodplain management regulations for its area of jurisdiction.

Development means any man-made change to improved or unimproved real estate, including but not limited to construction of Structures or other facilities, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of materials and equipment.

Elevation Certificate means the most current version of the Federal Emergency Management Agency's *Elevation Certificate* form, or a form that provides equivalent information and has been approved for use by the Floodplain Administrator.

Encroachment means the advance or infringement of uses, plant growth or Development into a Floodplain which may impede or alter the flow capacity.

Erosion means the process of the gradual wearing away of land masses. This peril is not per se covered under this ordinance. (See Flood-Related Erosion)

FEMA means the Federal Emergency Management Agency.

FIA means the Federal Insurance Administration of FEMA.

Flood or Flooding means a general and temporary condition of partial or complete inundation of normally dry land areas from: (1) the overflow of flood waters, (2) the unusual and rapid accumulation or runoff of surface waters from any source, and/or (3) the collapse or subsidence of land along the shore of a lake or other body of water as a result of Erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding.

Flood Boundary and Floodway Map (FBFM) means the official map on which FEMA or the FIA has delineated the Areas of Special Flood Hazard and the Floodway.

Flood Insurance Rate Map (FIRM) means the official map on which FEMA or the FIA has delineated both the Areas of Special Flood Hazard and the risk premium zones applicable to the Community.

Flood Insurance Study (FIS) means the official report provided by the FIA that includes Flood profiles, the FIRM, the FBFM and the Water Surface Elevations of the Base Flood.

Floodplain means areas that have been or may be covered partially or wholly by Floodwaters from the Base Flood.

Flood-Prone Area(s) means any land area susceptible to being inundated by water from any source. (See Flood or Flooding.)

Floodplain Administrator means the individual appointed to administer and enforce the Floodplain Management Regulations.

Floodplain Board means the Board of Directors of the Navajo County Flood Control District.

Floodplain Management means the operation of an overall program of corrective and preventive measures for reducing Flood damage, including but not limited to emergency preparedness plans, Flood control works and Floodplain Management Regulations.

Floodplain Management Regulations means this ordinance and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as grading and erosion control) and other applications of police power which control Development in Flood-Prone Areas. This term describes federal, state or local regulations in any combination thereof which provide standards for preventing and reducing Flood loss and damage.

Floodproofing means any combination of structural and non-structural additions, changes or adjustments to Structures which reduce or eliminate Flood damage to real estate or improved real property, water and sanitary facilities, Structures and their contents.

Floodproofing Certificate means the most current version of the Federal Emergency Management Agency's National Flood Insurance Program *Floodproofing Certificate for Non-Residential Structures* form, or a form that provides equivalent information and has been approved for use by the Floodplain Administrator.

Flood-Related Erosion means the collapse or subsidence of land along the shore of a lake or other body of water as a result of undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of

nature such as a flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in Flooding.

Floodway means the channel of a river or other Watercourse, and the adjacent land areas, that must be reserved in order to discharge the Base Flood without cumulatively increasing the Water Surface Elevation more than one foot, also referred to as **Regulatory Floodway**.

Floodway Fringe means that area of the Floodplain on either side of the Regulatory Floodway where Encroachment may be permitted.

Hardship as related to Article VI (Variances) of this ordinance means the exceptional hardship that would result from a failure to grant the requested Variance. The Floodplain Board requires that the Variance be exceptional, unusual and peculiar to the property involved. Mere economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences or the disapproval of one's neighbors likewise cannot, as a rule, qualify as a Hardship. All of these problems can be resolved through other means without granting a Variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

Highest Adjacent Grade means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a Structure.

Historic Structure means any Structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
4. Individually listed on a local inventory of historic places in Communities with historic preservation programs that have been certified either:

- a. By an approved state program as determined by the Secretary of the Interior; or
- b. Directly by the Secretary of the Interior in states without approved programs.

Levee means a man-made Structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control or divert the flow of water so as to provide protection from temporary Flooding.

Lowest Floor means the lowest floor of the lowest enclosed area including a Basement. An unfinished or Flood-resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a Basement area is not considered a building's Lowest Floor; provided, that such enclosure is not built so as to render the Structure in Violation of the applicable non-elevation design requirements of this ordinance.

Manufactured Home means a Structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term Manufactured Home does not include a Recreational Vehicle.

Market Value shall be determined by estimating the cost to replace the Structure in new condition and adjusting that cost figure by the amount of depreciation which has accrued since the Structure was constructed. The cost of replacement of the Structure shall be based on a square foot cost factor determined by reference to a building cost estimating guide recognized by the building construction industry. The amount of depreciation shall be determined by taking into account the age and physical deterioration of the Structure and functional obsolescence as approved by the Floodplain Administrator, but shall not include economic or other forms of external obsolescence. Use of replacement costs or accrued depreciation factors different from those contained in recognized building cost estimating guides may be considered only if such factors are included in a report prepared by an independent professional appraiser and supported by a written explanation of the differences.

Mean Sea Level means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 and the North American Vertical Datum (NAVD) of 1988 (or other datum, as specified) to which Base Flood Elevations shown on a Community's FIRM are referenced.

Mudslide (i.e., Mudflow) describes a condition where there is a river, flow or inundation of liquid mud down a hillside, usually as a result of a dual condition of loss of brush cover, and the subsequent accumulation of water on the ground preceded by a period of unusually heavy or sustained rain. A Mudslide may occur as a distinct phenomenon while

a landslide is in progress, and will be recognized as such by the Floodplain Administrator only if the Mudslide, and not the landslide, is the proximate cause of damage that occurs.

New Construction, for the purpose of Floodplain management, means Structures for which the Start of Construction commenced on or after the effective date of the Floodplain Management Regulations adopted by Navajo County and includes any subsequent improvements to such Structures. (For the purposes of determining insurance rates, New Construction means Structures for which the Start of Construction commenced on or after the effective date of the an initial FIRM for Navajo County, June 1, 1982, and includes any subsequent improvements to such Structures.)

Obstruction means any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, channelization, bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, vegetation or other material or Development in, along, across, or projecting into any Watercourse which may alter, impede, retard or change the direction and/or velocity of the flow of water, or due to its location, its propensity to snare or collect debris carried by the flow of water, or its likelihood of being carried downstream.

One Hundred Year Flood means the Flood having a 1% chance of being equaled or exceeded in any given year. (See Base Flood)

Person means an individual or his agent, a firm, partnership, association, corporation or other legal entity, or agent of the aforementioned groups, or the State of Arizona and its agencies and political subdivisions.

Public Safety and Nuisance As related to Article VI of this ordinance, means that the granting of a Variance must not result in anything which is injurious to safety or health of an entire community or neighborhood, or any considerable number of persons, or which unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

Recreational Vehicle means a vehicle which meets all of the following criteria:

1. Built on a single chassis.
2. 400 square feet or less when measured at the largest horizontal projection.
3. Designed to be self-propelled or permanently towable by a light duty truck.
4. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.

Regulatory Flood Elevation means an elevation one foot above the Base Flood elevation for a Watercourse for which the Base Flood Elevation has been determined and shall be as determined by the criteria developed by the Director of ADWR for all other Watercourses.

Regulatory Floodway means the channel of a river or other Watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood without cumulatively increasing the Water Surface Elevation more than one foot.

Repetitive Loss Structure means a Structure, covered by a contract for Flood insurance issued pursuant to the National Flood Insurance Act, that has incurred Flood-related damage on two occasions during any 10-year period ending on the date of the event for which a second claim is made, in which the cost of repairing the Flood damage, on average, equaled or exceeded 25% of the Market Value of the Structure at the time of each such Flood event. In addition to the current claim, the National Flood Insurance Program must have paid the previous qualifying claim.

Riverine means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

Special Flood Hazard Area (SFHA): See Areas of Special Flood Hazard.

Start of Construction applies to Substantial Improvement and other proposed Development and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a Structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns or any work beyond the stage of excavation; or the placement of a Manufactured Home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a Basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main Structure. For a Substantial Improvement, the actual Start of Construction means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure means a walled and roofed building, or a gas or liquid storage tank, that is principally above ground, as well as a Manufactured Home.

Substantial Damage means damage of any origin sustained by a Structure whereby the cost of restoring the Structure to its previous condition would equal or exceed 50% of the Market Value of the Structure before the damage occurred.

Substantial Improvement means any reconstruction, rehabilitation, addition or other improvement of a Structure, the cost of which equals or exceeds 50% of the Market Value of the Structure before the Start of Construction of the improvement. This term includes Structures which have incurred Substantial Damage, regardless of the actual repair work performed. The term does not, however, include either of the following:

1. Any project for improvement of a Structure to correct existing Violations of any state or local health, sanitary or safety code which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions.
2. Any alteration of a Historic Structure provided that the alteration will not preclude the Historic Structure's continued designation as such.

Variance means a grant of relief from the requirements of this ordinance pursuant to Article VI hereof which permits Development in a manner that would otherwise be prohibited by this ordinance.

Violation means the failure of a Structure or other Development to be fully compliant with this ordinance. A Structure or other Development without the Elevation Certificate, other required certifications or other evidence of compliance required by this ordinance is presumed to be in Violation until such time as the documentation is provided.

Water Surface Elevation means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 and the North American Vertical Datum (NAVD) of 1988 (or other datum, where specified) of Floods of various magnitudes and frequencies in the Floodplains of Riverine areas.

Watercourse means a lake, river, creek, stream, wash, arroyo, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial Flood damage may occur.

ARTICLE III

GENERAL PROVISIONS

1. **LANDS TO WHICH THIS ORDINANCE APPLIES.** This ordinance shall apply to the incorporated and unincorporated areas of Navajo County, including public lands, excluding those incorporated areas of cities or towns which have elected to assume Floodplain Management powers and duties pursuant to A.R.S. § 48-3610 as well as areas under the sovereign jurisdiction of an Indian tribe.
2. **BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD.** The Areas of Special Flood Hazard identified by FEMA in a scientific and engineering report entitled *The Flood Insurance Study for Navajo County, Arizona Unincorporated Areas*, dated September 26, 2008, with accompanying FIRMs and FBFMs of the same date, and all subsequent amendments and/or revisions, are hereby adopted by reference and declared to be a part of this ordinance. This FIS and attendant mapping is the minimum area of applicability of this ordinance and may be supplemented by other floodplain or drainage studies for other areas which allow implementation of this ordinance and which are recommended to the Floodplain Board by the Floodplain Administrator. The supplemental studies include previous drainage studies that have been accepted as supporting documentation for final plats. Other supplemental studies include floodplain and drainage studies previously authorized by the Floodplain Board. The Floodplain Board, within its area of jurisdiction, shall delineate, or may require developers of land to delineate for areas where Development is ongoing or imminent, and thereafter as Development becomes imminent, Floodplains consistent with the criteria developed by FEMA and the Director of ADWR. (See ARS § 48-3609.) The FIS, FIRMs and FBFMs are on file at the Navajo County Public Works Department, Navajo County Governmental Center, 100 E. Carter Drive, Holbrook, Arizona.
3. **COMPLIANCE.** All Development of land, construction of residential, commercial or industrial Structures and future Development within delineated Floodplain areas is subject to the terms of this ordinance and other applicable regulations.
4. **NON-ABROGATION.** This ordinance is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. The enforcement of easements (except public drainage easements), private covenants and deed restrictions is not within the jurisdiction of the Floodplain Board.
5. **INTERPRETATION.** In the interpretation and application of this ordinance, all provisions shall be:

- a. Construed as minimum requirements;
 - b. Deemed neither to limit nor repeal any other powers granted under federal or state statutes or regulations. This ordinance shall be interpreted and applied in a manner consistent with federal and state statutes and regulations pertaining to the same subject matter; and
 - c. Liberally construed to accomplish the intended purposes of this ordinance.
6. **WARNING AND DISCLAIMER OF LIABILITY.** The degree of Flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger Floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the Areas of Special Flood Hazard or uses permitted within such areas will be free from Flooding or Flood damage. This ordinance shall not create liability on the part of Navajo County or the Navajo County Flood Control District, any officer or employee thereof, the State of Arizona, the FIA or FEMA for any Flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.
7. **STATUTORY EXEMPTIONS.**
- a. In accordance with A.R.S. § 48-3609(H), unless otherwise provided this ordinance and any regulation adopted pursuant to it does not affect:
 - i. Existing legal uses of property or the right to continuation of such uses. However, if a nonconforming use is discontinued for 12 months or destroyed to the extent of 50% of its value, as determined by a competent appraiser, any further use shall comply with this ordinance and the regulations of Navajo County.
 - ii. Reasonable repair or alteration of property for the purposes for which the property was legally used on August 3, 1984, or on the date any regulation affecting such property takes effect, except that any alteration, addition or repair to a nonconforming Structure which would result in increasing its Flood damage potential by 50% or more shall be either Flood-proofed or elevated to or above the Regulatory Flood Elevation.
 - iii. Reasonable repair of Structures constructed with the written authorization required by A.R.S. § 48-3613.

- iv. Facilities constructed or installed pursuant to a certificate of environmental compatibility issued pursuant to A.R.S. Title 40, Chapter 2, Article 6.2.
- b. In accordance with A.R.S. § 48-3613, written authorization shall not be required, nor shall the Floodplain Board prohibit:
 - i. Development necessary to the construction of public highways, roads and streets intersecting or crossing a Watercourse.
 - ii. The construction of storage dams for watering livestock or wildlife, Structures on banks of a Watercourse to prevent Erosion of or damage to adjoining land if the Structure will not divert, retard or obstruct the natural channel of the Watercourse, or dams for the conservation of Floodwaters as permitted by A.R.S. Title 45, Chapter 6.
 - iii. Construction of tailing dams and waste disposal areas for use in connection with mining and metallurgical operations. This paragraph does not exempt those sand and gravel operations that will divert, retard or obstruct the flow of waters in any Watercourse from complying with and acquiring authorization from the Floodplain Board pursuant to regulations adopted under this ordinance.
 - iv. Other Development, if determined by the Floodplain Board that written authorization is unnecessary.
 - v. Any Flood Control District, county, municipality or other political subdivision from exercising powers granted to it under A.R.S. Title 48, Chapter 21, Article 1
 - vi. The construction of streams, waterways, lakes and other auxiliary facilities in conjunction with development of public parks and recreation facilities by a public agency or political subdivision.
 - vii. The construction and erection of poles, towers, foundations, support structures, guy wires and other facilities related to power transmission as constructed by any utility whether a public service corporation or a political subdivision.
- c. Before any construction authorized by Subsection b may begin, the responsible Person must submit plans for the construction to the Floodplain Board for review and comment.

8. **DECLARATION OF PUBLIC NUISANCE.** Every new Structure or other Development located or maintained within any Area of Special Flood Hazard after August 8, 1973, in Violation of this ordinance is a public nuisance per se and may be abated, prevented or restrained by action of the Floodplain Board pursuant to this ordinance or other applicable law. (*See ARS § 48-3614.*)
9. **ABATEMENT OF VIOLATIONS.** Promptly after discovery of a Violation of this ordinance, the Floodplain Administrator shall submit a report to the Floodplain Board which shall include all available information pertinent to said Violation. Promptly after receipt of this report, the Floodplain Board shall, after providing the alleged violator(s) with written notice and an opportunity to be heard, take one or more of the following actions:
- a. Order the alleged violator(s) to provide whatever additional information may be required for the Board's final determination. Such information must be provided to the Floodplain Administrator within 30 days after such order, and the Administrator shall submit an amended report to the Floodplain Board within 20 days. The matter shall be considered by the Floodplain Board at its next regularly scheduled meeting, at which time further action pursuant to this Section 9 and Article VI may be taken.
 - b. Issue a finding of "No Violation."
 - c. Initiate appropriate legal action to abate the Violation.
 - d. Issue a Variance in accordance with the provisions of Article VI.
 - e. Submit to FEMA a declaration for denial of insurance, stating that the property is in violation of a cited state or local law, regulation or ordinance, pursuant to Section 1316 of the National Flood Insurance Act of 1968 as amended.
10. **UNLAWFUL ACTS.** (*From ARS §§ 48-3613 and 48-3615.*)
- a. It is unlawful for any Person to engage in any Development or to divert, retard or obstruct the flow of waters in any Watercourse so as to create a hazard to life or property without securing the written authorization of the Floodplain Board. Where the Watercourse is a delineated Floodplain, it is unlawful to engage in any Development affecting the flow of waters without securing written authorization of the Floodplain Board.
 - b. Any Person violating the provisions of Subsection shall be guilty of a class 2 misdemeanor.

- c. In addition to other penalties or remedies otherwise provided by law, the Floodplain Board or any other Person who may be damaged or has been damaged as a result of the unauthorized diversion, retardation or Obstruction of a Watercourse has the right to commence, maintain and prosecute any appropriate action or pursue any lawful remedy to enjoin, abate or otherwise prevent any other Person from violating or continuing to violate this ordinance or regulations adopted pursuant to this ordinance. If a Person is found to be in Violation of this ordinance, the court shall require the violator to either comply with this ordinance if authorized by the Floodplain Board or remove the Obstruction and restore the Watercourse to its original state. The court may also award such monetary damages as are appropriate to the injured parties resulting from the Violation including reasonable costs and attorney fees.

11. **SEVERABILITY**. This ordinance and its various parts are hereby declared to be severable. Should any part of this ordinance be declared unenforceable by a court of competent jurisdiction, neither the ordinance as a whole nor the remaining parts shall be affected.

ARTICLE IV

ADMINISTRATION

1. **ESTABLISHMENT OF DEVELOPMENT PERMIT**. A Development Permit shall be obtained before Development, including placement of a Manufactured Home, begins within any Area of Special Flood Hazard. Application for a Development Permit shall be made on forms furnished by the Floodplain Administrator and may require, without limitation, plans in duplicate drawn to scale showing the nature, location, dimensions and elevation of the area in question; existing or proposed Structures, fill, storage of materials, drainage facilities, etc.; and the location of the foregoing. Specifically, the following information is required:
 - a. Proposed elevation, in relation to Mean Sea Level, of the Lowest Floor (including Basement) of all Structures located in Areas of Special Flood Hazard; in Zone A and AO, elevation of existing Highest Adjacent Grade and proposed elevation of Lowest Floor of all Structures.
 - b. Proposed elevation in relation to Mean Sea Level to which any nonresidential Structure will be Floodproofed.

- c. Certification by a registered professional engineer or architect that the Floodproofing methods for any nonresidential Structure meet the Floodproofing criteria in Article V.
 - d. Description of the extent to which any Watercourse will be altered or relocated as a result of the proposed Development.
- 2. **DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR.** The Floodplain Board shall by resolution appoint either the Navajo County Deputy Director of Flood Control or a Certified Floodplain Manager to serve as the Floodplain Administrator. In the absence of such appointment or in the event of a vacancy in the office, the Navajo County Engineer shall serve as the Floodplain Administrator.
- 3. **DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR.** Duties of the Floodplain Administrator shall include, without limitation:
 - a. Review of all Development located within Areas of Special Flood Hazard in order to determine that:
 - i. The permit requirements of this ordinance have been satisfied.
 - ii. All other required state and federal permits have been obtained.
 - iii. The site is reasonably safe from Flooding.
 - iv. The proposed Development does not adversely affect the carrying capacity of areas where Base Flood Elevations have been determined but a Floodway has not been designated. "Adversely affects" means that the cumulative effect of the proposed Development, when combined with all other existing and anticipated Development, will increase the Water Surface Elevation of the Base Flood more than one foot at any point.
 - b. Utilize the best available technical data and flood protection methods in enforcing the provisions of this ordinance.
 - i. Establish standards and/or policies as necessary to carry out the provisions and accomplish the purpose of this Ordinance. This shall allow for the use of any federal and state statutes, regulations, bulletins, guidelines and standards pertaining to Flood control or Flood protection measures.

- ii. When Base Flood Elevation data has not been provided in accordance with Article III, Section 2, the Floodplain Administrator shall obtain, review and reasonably utilize any Base Flood Elevation data available from a federal, state or other source in order to administer Article V. Any such information shall be consistent with the requirements of FEMA and the Director of ADWR and shall be submitted to the Floodplain Board for adoption or otherwise approved by the Floodplain Board.
 - iii. Along Watercourses where the Areas of Special Flood Hazard have not been determined, delineate, or require developers of land to delineate for areas where Development is ongoing or imminent, and thereafter as Development becomes imminent, Floodplains consistent with the criteria developed by the Director of ADWR.
- c. Maintain and make available for public inspection:
- i. The certified Regulatory Flood Elevation required in Article V, Section 1.
 - ii. The Floodproofing Certification required in Article V, Section 1.
 - iii. The Zone A0 certification required in Article V, Section 1.
 - iv. The certified flood vents openings elevation required in Article V, Section 1.
 - v. All permit records for repair of Flood-related damage to Structures on a cumulative basis over the life of the Structure.
 - vi. The Elevation Certification for additional Development standards, including subdivisions, in Article V, Section 4.
 - vii. The Floodway Encroachment Certification required in Article V, Section 7.
 - viii. A record of all Variance actions, including justification for their issuance, and report such Variances issued in the biennial report submitted to FEMA.
 - ix. Improvement calculations.
 - x. Previous FIS Studies and FIRM and FBFM maps.

- d. Whenever a Watercourse is to be altered or relocated:
 - i. Notify adjacent Communities and ADWR prior to such alteration or relocation, and submit evidence of such notification to FEMA.
 - ii. Require that the Flood-carrying capacity of the altered or relocated portion of said Watercourse is maintained.
- e. Ensure that within 120 days after completion of construction of any Flood Protection System which changes the rate of flow during a Flood or the configuration of the Floodplain upstream or downstream from or adjacent to the project, the Person responsible for installation of the project provides to the governing bodies of all jurisdictions affected by the project a new delineation of all affected Floodplains. The new delineation shall be done according to the criteria adopted by the Director of ADWR.
- f. Advise in writing and provide to any city or town having assumed jurisdiction over its Floodplains in accordance with A.R.S. § 48-3610 a copy of any Development plan of any application for a Development Permit, written authorization or Variance to develop land in a Floodplain or Floodway within one mile of the corporate limits of such city or town. The Floodplain Administrator shall also advise such city or town in writing and provide a copy of any Development plan of any major Development proposed within a Floodplain or Floodway which could affect Floodplains, Floodways or Watercourses within such city's or town's area of jurisdiction. Written notice and a copy of the Development plan shall be sent to such city or town no later than three working days after having been received by the Floodplain Administrator.
- g. Make interpretations where needed as to the exact location of the boundaries of the Areas of Special Flood Hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). Any Person contesting the location of a boundary shall be given a reasonable opportunity to Appeal the interpretation as provided in Article VI.
- h. Take action on Violations of this ordinance as authorized in Article III, Section 9.
- i. Notify FEMA and ADWR of any acquisition, by means of annexation, incorporation or otherwise, of additional areas of jurisdiction.
- j. Base Flood Elevations may increase or decrease resulting from physical changes affecting Flooding conditions. As soon as practicable, but not later

than six months after the date such information becomes available, the Floodplain Administrator shall notify FEMA of the changes by submitting technical or scientific data in accordance with Chapter 44 of the Code of Federal Regulations, Section 65.3. Such a submission is necessary so that upon confirmation of those physical changes affecting Flooding conditions, risk premium rates and Floodplain management requirements will be based upon current conditions.

- k. Complete and submit a Biennial Report to FEMA.

ARTICLE V

PROVISIONS FOR FLOOD HAZARD REDUCTION

- 1. STANDARDS OF CONSTRUCTION. In all Areas of Special Flood Hazard, the following standards are required:

- a. Anchoring:

- i. All New Construction and Substantial Improvements shall be anchored to prevent flotation, collapse or lateral movement of the Structure.
 - ii. All Manufactured Homes shall meet the anchoring standards of Subsection 5.b.

- b. Construction Materials and Methods:

- i. All New Construction and Substantial Improvements shall be constructed with materials and utility equipment resistant to Flood damage for all construction below the Regulatory Flood Elevation.
 - ii. All New Construction and Substantial Improvements shall be constructed using methods and practices that minimize Flood damage.
 - iii. All New Construction, Substantial Improvements and other proposed new Development shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during

conditions of Flooding and shall be elevated at or above the Regulatory Flood Elevation. This includes the HVAC units located adjacent to the Structure.

- iv. Within Zones AH and AO, adequate drainage paths around Structures on slopes shall be provided to guide Flood waters around and away from proposed or existing Structures.

c. **Elevation and Flood-Proofing:**

- i. **Residential construction.** Residential New Construction or Substantial Improvement, shall have the Lowest Floor, including Basement:

- 1. In an AO Zone, the Structure shall be elevated at or above the Regulatory Flood Elevation or elevated at least two feet above the Highest Adjacent Grade if no depth number is specified.
- 2. In an A Zone where a BFE has not been determined, the Structure shall be elevated in accordance with the criteria developed by the Director of ADWR or elevated at a minimum of two feet above the adjacent grade or street elevation, whichever is higher.
- 3. In the A zone created by the decertification of the Winslow Levee, the Structure shall be elevated a minimum of three feet above adjacent grade or street elevation, whichever is higher. When the Winslow Levee floodplain study is finalized and approved by the Floodplain Board, the Flood zone will change from A to AE and the Base Flood Elevations reflected in the study will be used to establish the lowest floor elevation.
- 4. In Zones AE, AH and A1-30, the Structure shall be elevated at or above the Regulatory Flood Elevation.

During the Structure's construction phase, a preliminary Elevation Certificate shall be provided indicating that requirements for elevation, flood resistant material, and venting will be met. Upon completion of the Structure and prior to issuance of the Certificate of Occupancy, the elevation of the Lowest Floor including Basement shall be:

Certified, via an Elevation Certificate, by a registered professional engineer or surveyor, and verified by the Community's

building inspector to be properly elevated and vented per Subsection 1.b. and 1. d. Such certification and verification shall be provided to the Floodplain Administrator.

ii. **Nonresidential construction.** Nonresidential New Construction or Substantial Improvement shall either be elevated to conform with Subsection 1.c.i or, together with attendant utility and sanitary facilities, shall:

1. Be Floodproofed below the elevation recommended under Subsection 1.c.i so that the Structure is watertight with walls substantially impermeable to the passage of water; The Floodproofing method shall be certified utilizing the Floodproofing Certificate;
2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
3. Be certified by a registered professional engineer or architect that the standards of this Subsection are satisfied. Such certification, shall be provided to the Floodplain Administrator.

d. **Flood openings.** All New Construction and Substantial Improvement with fully enclosed areas below the Lowest Floor (excluding Basements) that are usable solely for parking of vehicles, building access or storage, and which are subject to Flooding, shall be designed to automatically equalize hydrostatic Flood forces on exterior walls by allowing for the entry and exit of floodwater. Designs for meeting this requirement must meet or exceed the following criteria:

- i. Have a minimum of two openings, on different sides of each enclosed area, having a total net area of not less than one square inch for every square foot of enclosed area subject to Flooding. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves or other coverings or devices provided that they permit the automatic entry and exit of floodwater; or
- ii. If it is not feasible or desirable to meet the openings criteria stated above, a registered engineer or architect may design and certify the openings.

- iii. The vent opening dimension is the effective net opening. If concrete blocks are used, the effective net opening area does not include the wall and web area of the block.
- e. **Manufactured Homes.** Manufactured Homes shall meet the above standards and also the standards in Section 5.
- f. **Garages and low cost Accessory Structures.**
 - i. **Attached and Detached garages.**
 - 1. A garage attached to a residential Structure, or a separate detached structure used solely for parking (2 cars or smaller) may be constructed with the garage floor slab below the Regulatory Flood Elevation. The garage must be designed to allow for the automatic entry of Flood waters. See Subsection 1.d. Areas of the garage below the Regulatory Flood Elevation must be constructed with flood resistant materials. See Subsection 1.b. The venting and use of flood resistant material shall be certified, via an Elevation Certificate, by a registered professional engineer or surveyor, and verified by the Community's building inspector to be properly vented and proper use of flood resistant materials. A Single Elevation Certificate may serve to certify both residential Structure and attached garage. A separate Elevation Certificate is required for detached garages.
 - 2. A garage attached to a nonresidential Structure or a detached garage must meet the above requirements or be dry flood proofed.
 - ii. **Accessory Structures.**
 - 1. An Accessory Structure used solely for limited storage, as defined in Article II, may be constructed such that its floor is below the Regulatory Flood Elevation, provided the Structure is designed and constructed in accordance with the following requirements:
 - a. Use of the Accessory Structure must be limited to storage;
 - b. The Accessory Structure must be adequately anchored to prevent flotation, collapse and lateral movement;

- c. The Accessory Structure must comply with floodplain encroachment provisions in Section 7; and
 - d. Flood-resistant materials must be used and all mechanical and utility equipment must be elevated or flood-proofed to or above the Regulatory Flood Elevation.
- g. **Fill material.** Fill material used to elevate Structures out of the Area of Special Flood Hazard shall meet all of the following requirements:
- i. The top of the fill material shall at no point be lower than the Regulatory Flood Elevation.
 - ii. The fill shall extend at least 15 feet beyond the walls or the supporting frame of the Structure.
 - iii. The fill shall meet the materials requirements and shall be placed and compacted in accordance with the uniform building code as adopted by Navajo County (Navajo County Building Safety Ordinance).
 - iv. The fill shall be protected against erosion and scour using appropriate materials and methods as approved by the District Engineer.

2. STANDARDS FOR STORAGE OF MATERIALS AND EQUIPMENT.

- a. The storage or processing of materials that are, in time of Flooding, buoyant, flammable, explosive or potentially injurious to human, animal or plant life is prohibited.
- b. Storage of other material or equipment may be allowed if not subject to major damage by Floods and if firmly anchored to prevent flotation, or if readily removable from the area within the time available after Flood warning.

3. STANDARDS FOR POTABLE WATER AND SANITARY SEWAGE SYSTEMS.

- a. All new or replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of Flood waters into the system and discharge from systems into Flood waters.

- b. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during Flooding.
- c. Waste disposal systems shall not be installed partly or wholly in a Regulatory Floodway. (*Requirement from ARS § 48-3609.*)

4. STANDARDS FOR SUBDIVISIONS.

- a. All preliminary subdivision proposals (including proposals for Manufactured Home parks and subdivisions), greater than 50 lots or five acres, shall identify any Area(s) of Special Flood Hazard and the elevation of the Base Flood.
- b. All final subdivision plans will provide the elevation(s) of proposed Structure(s) and pads. If the site is filled above the Base Flood, the final Lowest Floor and pad elevations shall be certified by a registered professional engineer or surveyor and provided to the Floodplain Administrator.
- c. All subdivision proposals shall be consistent with the need to minimize Flood damage.
- d. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize Flood damage.
- e. All subdivisions shall provide adequate drainage to reduce exposure to Flood hazards and at a minimum meet the drainage requirements in the Navajo County Subdivision Regulations and Requirements.

5. STANDARDS FOR MANUFACTURED HOMES. All Manufactured Homes and Substantial Improvements thereto shall:

- a. Be elevated so that the bottom of the structural frame or the lowest point of any attached appliances, whichever is lower, is at or above the Regulatory Flood Elevation.
- b. Be securely anchored to an adequately anchored foundation system to resist flotation, collapse or lateral movement. Methods of anchoring may include, without limitation, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.

6. **STANDARDS FOR RECREATIONAL VEHICLES.** All Recreational Vehicles placed on site shall either:
- a. Be on site for fewer than 180 consecutive days and be fully licensed and ready for highway use. A Recreational Vehicle is "ready for highway use" if it is on its wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices, and has no permanently attached additions; or
 - b. Meet the permit requirements of Section IV of this ordinance and the elevation and anchoring requirements for Manufactured Homes in Section 5.
7. **FLOODWAYS.** Located within Areas of Special Flood Hazard are areas designated as Floodways. Since a Floodway is an extremely hazardous area due to the velocity of Flood waters which carry debris, potential projectiles and Erosion potential, the following special provisions apply:
- a. Encroachments, including fill, New Construction, Substantial Improvements and other Development are prohibited unless a registered professional engineer or architect provides to the Floodplain Administrator certification that they will not result in any increase in Flood levels during the occurrence of the Base Flood discharge.
 - b. If Subsection 7.a is satisfied, all New Construction and Substantial Improvements shall comply with all other applicable Flood hazard reduction provisions of Article V.

ARTICLE VI

VARIANCE PROCEDURE

1. **NATURE OF VARIANCES.** The Variance criteria set forth in this section are based on the general principle of zoning law that Variances pertain to a piece of property and are not personal in nature. A Variance may be granted for a parcel of property with physical characteristics so unusual that complying with the requirements of this ordinance would create a Hardship to the applicant or the surrounding property owners. The characteristics must be unique to the property and not be shared by adjacent parcels. The unique characteristics must pertain to the land itself, not to the Structure, its inhabitants or the property owners.

It is the purpose of this ordinance to promote the public health, safety and general welfare and to minimize public and private losses in Areas of Special Flood Hazard. This need is so compelling, the potential consequences are so serious, and the implications of the cost of insuring a Structure built below the Regulatory Flood Elevation are so severe that Variances from the Regulatory Flood Elevation or other requirements of this ordinance will be rare. Therefore, the Variance guidelines provided herein are detailed and contain multiple provisions that must be met before a Variance can be granted. These criteria are designed to screen out those situations in which alternatives other than a Variance are more appropriate.

2. APPEAL BOARD.

- a. The Floodplain Board shall hear and decide Appeals and requests for Variances from the requirements of this ordinance. The Floodplain Administrator shall adopt forms and procedures for the filing and hearing of Appeals and requests for Variances.
- b. The Floodplain Board shall hear and decide Appeals when it is alleged that there is an error in any requirement, decision, interpretation or determination by the Floodplain Administrator in the enforcement or administration of this ordinance.
- c. In deciding requests for Variances, the Floodplain Board shall consider all technical evaluations; all relevant factors, testimony and exhibits; the standards specified in other sections of this ordinance, and the following as applicable:
 - i. The nature and extent of the alleged Hardship that would result if strict compliance with the requirements of this ordinance were required.
 - ii. The danger that materials may be swept onto other lands to the injury of others.
 - iii. The danger to life and property due to Flooding or Erosion damage.
 - iv. The susceptibility of the proposed Structure and its contents to Flood damage and the effect of such damage on the individual owner.
 - v. The importance to the Community of the services provided by the proposed Structure or Development.

- vi. The necessity of a waterfront location to the proposed Structure or Development.
 - vii. The availability of alternative locations for the proposed Structure or Development which are not subject to Flooding or Erosion damage.
 - viii. The compatibility of the proposed Structure or Development with existing and anticipated Development.
 - ix. The relationship of the proposed Structure or Development to the comprehensive plan and Floodplain Management Program for that area.
 - x. The safety of access to the property in time of Flood for ordinary and emergency vehicles.
 - xi. The height, velocity, duration, rate of rise and sediment transport of the Flood waters expected at the site.
 - xii. The costs of providing governmental services during and after Flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, water system and streets and bridges.
- d. Upon consideration of the factors in Subsection 2.c and the purposes of this ordinance, the Floodplain Board may attach such conditions to the granting of Variances as it deems necessary to further the purpose of this ordinance.
- e. Any applicant to whom a Variance is granted shall be given written notice over the signature of the Floodplain Administrator that (1) the issuance of a Variance to construct a Structure below the Base Flood level will result in increased premium rates for Flood insurance up to amounts as high as \$25 per \$100 of insurance coverage, (2) such construction below the Base Flood level increases the risks to life and property, and (3) the land upon which the Variance is granted shall be ineligible for exchange of land pursuant to any Flood relocation and land exchange program.
- i. A copy of such notice shall be maintained with a record of all Variance actions as required in Subsection 2.f. A copy of the notice shall also be recorded by the Floodplain Administrator in the office of the Navajo County Recorder so that it appears in the chain of title to the subject property.

- f. The Floodplain Administrator shall maintain a record of all Variance actions, including the justification for their issuance, and shall report all Variances in the Floodplain Board's biennial report to FEMA.

3. CONDITIONS FOR VARIANCES.

- a. Generally, Variances may be issued for New Construction and Substantial Improvements to be erected on a lot of ½ acre or less in size that is contiguous to and surrounded by lots with existing Structures constructed below the Base Flood level, providing the requirements of Articles IV and V of this ordinance have been fully considered. As the lot size increases beyond ½ acre, the technical justification required for issuing the Variance increases.
- b. Variances may be issued for the repair, rehabilitation or restoration of Historic Structures, upon a determination that the proposed repair or rehabilitation will not preclude the Historic Structure's continued designation as such and that the Variance is the minimum necessary to preserve the historic character and design.
- c. Variances shall not be issued within any designated Floodway if any increase in Flood levels during the Base Flood discharge would result.
- d. A Variance shall only be issued upon a determination that it is the minimum necessary, considering the Flood hazard, to afford relief.
- e. Variances shall only be issued upon:
 - i. A showing of good and sufficient cause.
 - ii. A determination that failure to grant the Variance would result in Hardship to the applicant.
 - iii. A determination that the granting of the Variance will not result in increased Flood heights, additional threats to public safety or extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

SO ORDAINED by the Board of Directors of the Navajo County Flood Control District on July 28, 2009.